Work Order ID 100924 May-01-13 7:17:34 AM				*100)924*				· .		Page 1
Revision ID:	D3195-043 Bracket Assem	bly	A	Accept	*N900	<u>040</u>	100)* :	Setup Star	1 7	S1* S2*
	4/30/13	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*		Cust Item I Customer:	D:	,				
Approvals:	Process Plan	n: ML3	Date: <u>B-0</u> S-0	7 Tooling:	D:	ate:		I	Run Star	1/1	R1*
	QC:	,	Date:	SPC (Y/N):	D	ate:			Stop	` *N	R2*
Sequence ID/ Work Center ID)	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revi	ision Nbr					armatif.				
D3195	Rev	В									
*100 *100* Bandsaw Jeaspa Bandsaw		BAND SAW Memo Cut blank	s: (1.250" x 1.500") x 3.60	0.00 0.00)" long	S\$ 13.	-05-1C)	6	Ø		
110 *440*		HAAS CNC VERTIC	AL MACHINING #1	0.00				/			DAS 25
110 HAAS 1		Memo	•	0.00				6			
HAAS CNC vertical	machine #1			334 and Dwg D3195 Identi	ify as D3195-	. •					
		OC2 Improper morte of		0.00							10.4 m

0.00

Memo

120

Quality Control

												DQA:	Da	te:	
NCR:	Yes	/ No				WORK ORDER NON-	CON	NFORN	MANCE / UPI	DATE		QA Closed:	 Da	te:	
Mark Ord						DISPOSITION				AGAINS	T DE	PARTMENT,	/PROCESS		15, 4 m (4) 10 10 10 10 10 10 10 10 10 10 10 10 10
Work Orde	er.	*				Rework	1 I		Skid-tube	Crosstub	еП		Water Jet		Engineering
Part N	No.					Scrap	1 1		Machining	Small Fa		Pro	d. Eng. Coor.		Quality
		··				Use-as-is		Therm	oforming	Finishin	~ —	Rec/Sto	re/Packaging		Other
NCR	۷o.					Work Order Update	╛╽		Large Fab	Composit	e		Supplier		
Root	П				Descri	ption of work order update		nitial	Act	ion		Sign &			
Cause	l	Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Descr	iption		Date	Verificatio	n	QC Inspector
Doc/Data															
Equip/Tooling															
Operator															
Material															
Setup			İ												
Other															
Process													:		
Supplier															
Training															
Unapproved														,	
						F	AUL	T CATE	GORY						
Landi	ng G	ear				General	·	ı ·			_	7			1
	Ш	Bending				Bend		Grain			<u> </u>	Ovalized	N _c	<u></u>	Pressure/Forced
	Ш	Centre No	ot Conce	ntric to	o/s	BOM/Route · '	L	Hardwa				Over/Under		<u> </u>	Temperature/Cure
		Cracks				Broken/Damaged		1	on Incomplete			Part Incorre		<u> </u>	Weld
		Crushed/	Crimped.			Burrs	\perp	-	ions Incomplete/l	Jnclear	<u> </u>	Part Lost/M	-		Wrong Stock Pulled
	\square	Cuffs				Contamination	<u></u>	Mainte	nance			Part Moved			
	Ш	Heat Trea	ıt			Countersink	\perp	Mislabe	led		_	Positioned \	_	_	7
		Inspection Strip in Tube				Cut Too Short		Misread	i			Power Loss,	/Surge		Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing Finish

k												
Work Ord May-01-13 7:1		00924		*1	OO!	924*						Page 2
Item ID: Revision ID: Item Name:	D3195-043 Bracket Asse			Accept		*N900	040	100)* s	Setup Sta	IV	S1* S2*
Start Date: Required Date Reference:	4/30/13 e: 4/30/13	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*	•		Cust Item II Customer:	D:					. 12
Approvals:	Process P	lan:	Date:	Tooling:		Da	ıte:	_	P	Run Sta	rt *N	R1*
			Date:	_): _		ite:			Sto	*N	R2*
Sequence ID/ Work Center	ID	Operation Description		Set Up/ Run Ho		Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		QC8- Inspect parts - seco	ond check	0.00								
130 QC Quality Control		Memo		0.00	Æ	_ 13/05/	/3		6	\$		
					•							
140		Chemical Conversion Co	at per QSI005 4.1	0.00							10	
140 HandFinish Hand Finishing		Memo		0.00					6	Ø	JH B	3-5-13.

150

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00

150 Powdercoat

Powder Coating

Memo START TIME: 0.00

OVEN TEMPERATURE:

_FINISH TIME: 3205

6xx mf 13/05/04

m1212Ja

											DQA:	Date:	
NCR: Y	'es /	No				WORK ORDER NON-O	CON	NFORN	MANCE / UP	DATE	QA Closed	: Date:	
Mante Ondo						DISPOSITION				AGAINST D	EPARTMENT	/PROCESS	
Work Orde Part N NCR N	 Io					Rework Scrap Use-as-is Work Order Update		Therm	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	 }	Water Jet od. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Descri	ption of work order update	1	nitial	Act	ion	Sign &		
Cause	D	ate	Step	Qty	c	or Non-conformance	Ch	ief Eng	Descr	iption	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved													
	<u> </u>					F	AUL	T CATE	GORY				
Landii	Cer Cra Cru	nding ntre No cks shed/C	t Concer	ntric to	o/s	General Bend BOM/Route Broken/Damaged Burrs		Instruct	on Incomplete ions Incomplete/U	Jnclear	Ovalized Over/Unde Part Incorre	ect Missing	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled
N. C.	Insp	at Treat	Strip in	Tube		Contamination Countersink Cut Too Short Drill Holes		Mainte Mislabe Misread Offset	eled		Part Moved Positioned Power Loss	Wrong	Other

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

May-01-13 7:1	7:34 AM								· · · · · · · · · · · · · · · · · · ·						
Item ID: Revision ID: Item Name:	D3195-043 Bracket Asser	nbly			Accept	*N9	nn(<u>040</u>	100)* s	etup Si	tart top	*N:	S1* S2*	
Start Date: Required Date Reference:	4/30/13 : 4/30/13	Start Qty: 4.00 Req'd Qty: 4.00		*4* *4*		Cust Custo	ltem IE mer:) :			·				٠
Approvals:		an:	Date:		Tooling: SPC (Y/N):		_ Dat		· · · · · · · · · · · · · · · · · · ·	R		tart top		R1* R2*	
Sequence ID/ Work Center I 160 *160* QC Quality Control	D	Operation Description QC3- Inspect Part Finish Memo	·		Set Up/ Run Hours 0.00	Too	I ID	Tool#	Plan Code	Accept Qty	Reject Qty		Reject Number	Insp. Stamp	ļ
170 *170* Small Fab Small Fab		Small Fab Memo 1-Lightly San D3195A/RCo	d bonding su ntact Cemen	rface2-Bond	0.00 0.00 1 D3195-7 into D3195-1	3as per Dwg				_6_	<u>_</u> 9		· · ·	FF 13-05.	- <i>1</i> .
1 AN QC Quality Control		QC5- Inspect part completed Memo	eness to step	on W/O	0.00	As 27 5 15				6	· · · · · · · · · · · · · · · · · · ·	 ,-	;		

										DQA:	Date	: ;
NCR: Y	es / No				WORK ORDER NON-C	100	NFORM	MANCE / UPD				
										QA Closed:	Date):
Work Orde	ar.				DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Work Orac					Rework	1		Skid-tube	Crosstube		Water Jet	Engineering
Part N	No				Scrap		ſ	Machining	Small Fab		d. Eng. Coor.	Quality
NCR N	lo				Use-as-is Work Order Update			noforming Large Fab	Finishing Composite	Rec/Stoi	re/Packaging Supplier	Other
Root				Descri	ption of work order update	Γi	Initial	Actio	on	Sign &		
Cause	Date	Step	Qty	C	or Non-conformance	Ch	nief Eng	Descri	ption	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling												
Operator												
Material												
Setup		,										
Other		•										
Process			1									
Supplier												
Training												
Unapproved												
					F.	AUL	T CATE	GORY				
Landi	ng Gear			_	General		,			1	_	 1
	Bending				Bend		Grain			Ovalized	_	Pressure/Forced
	Centre	Not Conce	ntric to	o/s	BOM/Route		Hardwa		ļ	Over/Under	-	Temperature/Cure
	Cracks				Broken/Damaged		4	on Incomplete		Part Incorre	 -	Weld
		I/Crimped			Burrs	_	4	ions Incomplete/Ur	nclear	Part Lost/M	issing	Wrong Stock Pulled
	Cuffs				Contamination		Mainte			Part Moved		
	Heat Tr	eat			Countersink		Mislabe	led	·	Positioned \		
	Inspecti	on Strip ir	Tube		Cut Too Short		Misread	ł		Power Loss/	'Surge	Other
	Ripples	in Bend			Drill Holes		Offset					

Out of Calibration

Out of Sequence

Outside Dimensions

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Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

Work Ord <i>May-01-13 7:1</i>		0924		*100	1924*			-			Page 4
Item ID: Revision ID: Item Name:	D3195-043 Bracket Asser	nbly		Accept	*N900	040	100)* s	etup Star Stop	I VI	S1* S2*
Start Date: Required Date Reference:	4/30/13 : 4/30/13	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*		Cust Item I Customer:	D:			S.		
Approvals:		nn:		Tooling: SPC (Y/N):		ite:		R	tun Star Stoj	, "I Z I	R1* R2*
Sequence ID/ Work Center 1	ID	Operation Description Identify as per dwg & St	ock Location:	Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
100 Packaging Packaging		Memo		0.00							35-15
200		OC21- Final Inspection	- Work Order Release	0.00					12	1/1	n dA

0.00

Memo

200

Quality Control

NCR: Ye	es / No				WORK ORDER NON-	CON	ifori	MANCE / UP	DATE				
										QA Closed:	Dat	e:	ره کښونځي
Work Orde	r:				DISPOSITION				AGAINST DE	PARTMENT	PROCESS		
					Rework	7		Skid-tube	Crosstube		Water Jet	Engineering	
Part N	0.				Scrap	1	1	Machining	Small Fab	Pro	d. Eng. Coor.[Quality	
					Use-as-is]	Thern	noforming	Finishing	Rec/Stor	e/Packaging	Other	
NCR N	0				Work Order Update	┚╽		Large Fab	Composite		Supplier		Ш
Root				Descri	ption of work order update	lr	nitial	Ac	tion	Sign &			
Cause	Date	Step	Qty	(or Non-conformance	Chi	ief Eng	Desc	ription	Date	Verification	n QC Inspec	tor
Doc/Data						Ī							
Equip/Tooling											٠,		
Operator													
Material													
Setup	_		1										
Other		}											
Process													
Supplier	_							,					
Training													
Unapproved		L	<u> </u>							<u> </u>			
						AUL	T CATE	GORY					
Landin	g Gear				General	\Box	Grain			Ovalized	ſ	Pressure/Force	۸d
-	Bending			\(\rightarrow \ri	Bend BOM/Route	\vdash	Hardwa			Over/Under	tolorance	Temperature/0	
-	Centre No	ot Concer	ntric to C	" ³ -	Broken/Damaged	\vdash		ion Incomplete	-	Part Incorre	ŀ	Weld	Juic
-	Crushed/	Crimpad		-	Burrs	-		tions Incomplete/	'I Inclear	Part Lost/Mi	1	Wrong Stock P	ulled
-	Cuffs	crimpeu.	-	<u> </u>	Contamination	\vdash		enance	Officient	Part Moved	1331116		uncu
<u> </u>	Heat Trea	1+		-	Countersink	\vdash	Mislabe			Positioned V	Vrong		
-	Inspection		Tube		Cut Too Short	\vdash	Misrea		 	Power Loss/		Other	
}	Ripples in	•		-	Drill Holes	\vdash	Offset	- -	<u> </u>	رددد. د. د. د	· U -		
-	Torque W		Extrusion	, 	Drawing	\vdash		Calibration					
	Turning S			-	Finish	\vdash		Sequence					
1	1	1			1			•			<u> </u>		

Outside Dimensions

DQA:_

Date:

Wave/Twist in Tube

Work Order ID:

100924

Parent Item:

D3195-043

Parent Item Name: Bracket Assembly

Start Date: 4/30/13

Required Date: 4/30/13

Start Qty: 4.00

Required Qty: 4.00

Comments:	IPP Rev:A New I	Issue 05-11-08	JLM										
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3195-7 Pad		Manufactured	No			100	Each	13.0000	1	4	F.	= 13-	05-1
				Location		Loc Qty	Lo	oc Code					
				GA		13							
				7304		1							
)			8370	<u> 5</u>	12				_6			
M6061T6B1.500X01.250 6061-T6 Bar 1.50 x 1.25	}	Purchased	No			170	f	34.9427	0.3	1.263158 850		4,3-0	01-20
				Location		Loc Qty	<u>Lo</u>	oc Code					•
				MAT003		34.9426859							
				1236	49	0.2056859							
				- 1244	43	34.737			_1.8	350'_			

											DQA:	Da	te:	
NCR:	res / N	0			WORK ORDER NON-C	O	NFORM	AANCE / UPI	DATE			_		
****								SWEE		QA	Closed:	Da	te:	
Work Orde	nr:				DISPOSITION				AGAINST DE	PAR [*]	TMENT/	PROCESS		
Work Orde	=1.		· · · · · · · · · · · · · · · · · · ·		Rework	1		Skid-tube	Crosstube			Water Jet		Engineering
Part N	No.				Scrap	1		Machining	Small Fab		Prod	d. Eng. Coor.		Quality
					Use-as-is	1	Therm	noforming	Finishing	F	Rec/Stor	e/Packaging		Other
NCR N	١٥.				Work Order Update]		Large Fab	Composite			Supplier		
11.00						لــــا			**************************************			-		
Root					ption of work order update	1	nitial		tion	1	gn &			0.61
Cause	Dat	e Step	Qty		or Non-conformance	Ch	ief Eng	Desci	ription	[Date	Verificatio	n	QC Inspector
Doc/Data						1								
Equip/Tooling			ļ					T.						•
Operator	Ш				•									
Material													ŝ	
Setup	Ш										Ì			
Other						}								
Process														
Supplier														
Training								*		1				
Unapproved			<u> </u>							<u>L</u>				
					F	AUI	T CATE	GORY						
Landi	ng Gear				General	_	1			7			_	1 , .
	Bendi	ng		<u> </u>	Bend		Grain				lized		<u>_</u>	Pressure/Forced
	Centr	e Not Conce	entric to	o/s	BOM/Route		Hardwa	re		-	•	tolerance	<u>_</u>	Temperature/Cure
	Crack	5			Broken/Damaged		4 '	on Incomplete	<u> </u>	4	t Incorrec		\vdash	Weld
	Crush	ed/Crimped	1 .		Burrs		Instruct	ions Incomplete/	Unclear	4	t Lost/Mi	ssing	L	Wrong Stock Pulled
	Cuffs	·			Contamination	<u></u>	Mainte	enance	ļ	Pari	t Moved			,
	Heat	Treat			Countersink		Mislabe	eled	<u></u>	Pos	itioned V	Vrong		1
	Inspection Strip in Tube				Cut Too Short		Misread	t	-	Pov	ver Loss/	Surge		Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Drill Holes

Drawing

Finish

Folio

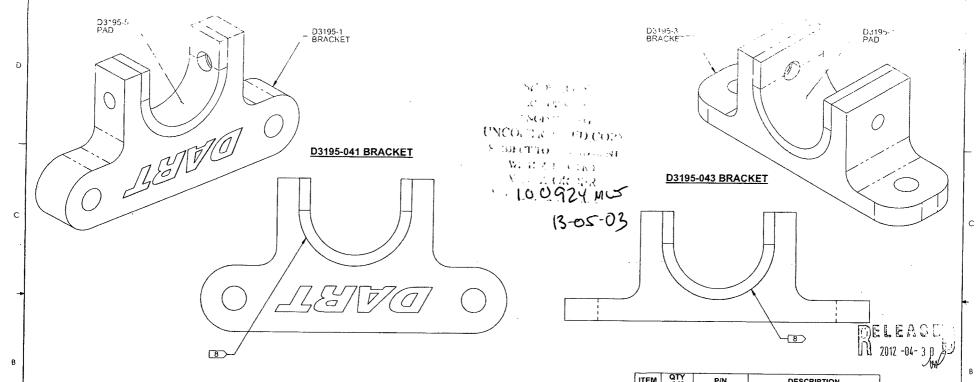
Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

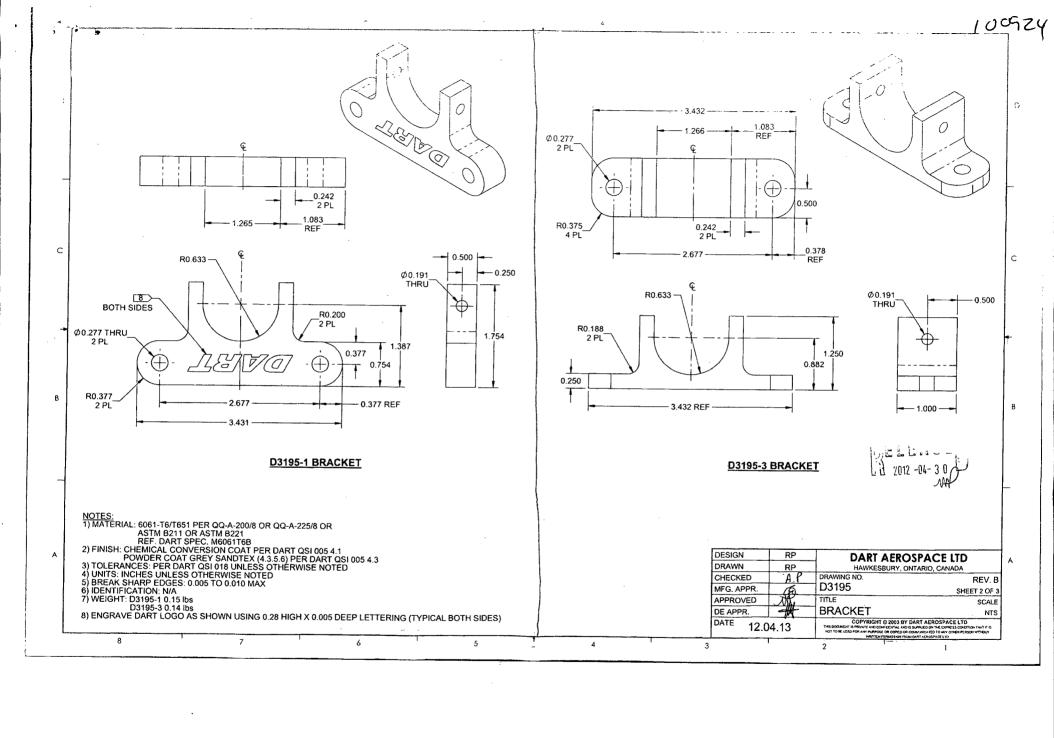
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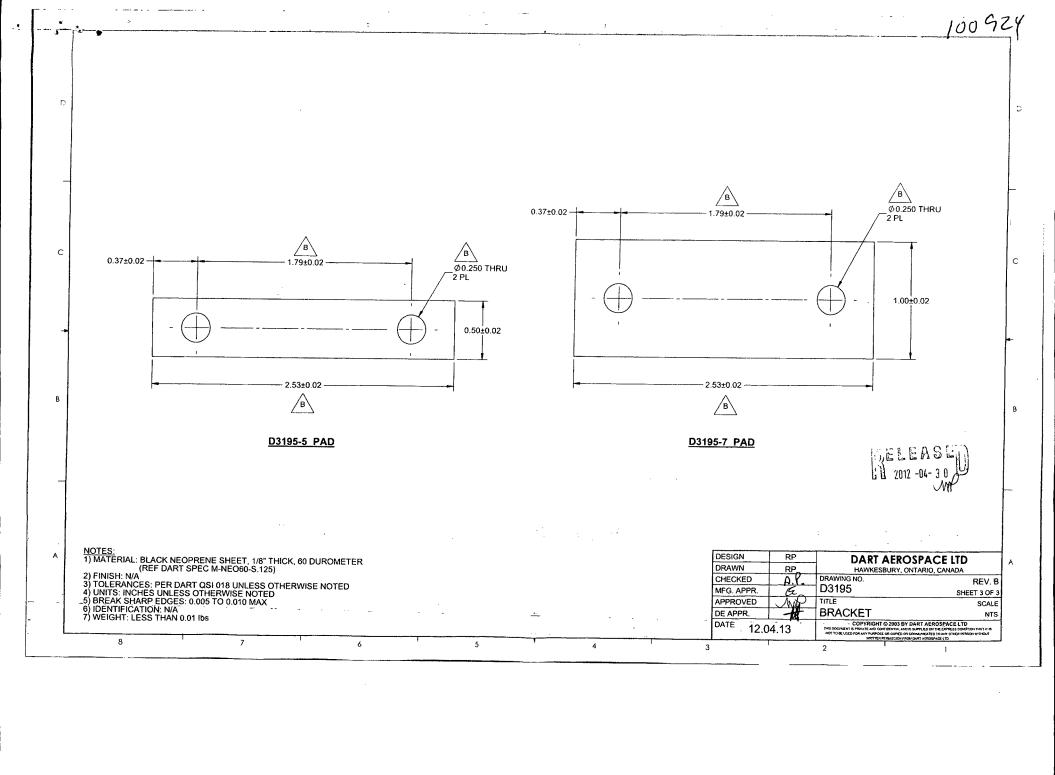


ITEM	QTY -041	P/N	DESCRIPTION
	Х	D3195-041	BRACKET
1	1	D3195-1	BRACKET
2	1	D3195-5	PAD

ITEM	QTY -043	P/N	DESCRIPTION
	Х	D3195-043	BRACKET
1	1	D3195-3	BRACKET
2	1	D3195-7	PAD

В	- UPDATED DRAWING FORMAT. - ADDED NOTE 8, SHEET 1. - D3195-5 & D3195-7 DIMENSIONS EXTENSIVELY REVISED (86-3, C3-3) - REF: PART1-130			RР	12.04.13	
A	NEW IS:	SUE		CP	03 06.23	
REV.	DESCRIPTION			BY	DATE	
DESIGN	4	RP	DART AEROSP	ACE I	ITD	
DRAWN		RP	HAWKESBURY, ONTARIO, CANADA			
CHECKED		A.P.	DRAWING NO.			
MFG. A	PPR.	B.	D3195		SHEET 1 OF 3	
APPRO	APPROVED JAN		TITLE		SCALE	
DE APPR.		di-	BRACKET		NTS	
DATE	12.0	4.13	COPYRIGHT © 2003 BY DART THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLE NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMAN	CATED TO ANY OTH	CONDITION THAT IT IS	





DART AEROSPACE LTD	Work Order: । ००१ २५	····
Description: heacket	Part Number: D3195-3	
Inspection Dwg: \(\)395 Rev: \(\)8	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

Drawing	Tolerance	Actual	Accept	Reject	Method of	0
Dimension	roterance	Dimension	Accept	Reject	Inspection	Comments
6,277		277			กา	
R 375	+-010	-345	/.		R-G	
2.677	010	2-677			yern	22-10
. 242	010	-243			~	
_378	+-010	380			~	
-500	010	.501			~	
1083	1-010	1.081				
1266	010	1-269	/		-	
3,432	7-010	3435				
R.188	010	381	/			
-250	+_010	251	/		ř	
<u>- 8</u> 82	t-010	-882	/		-	
L250	- 010	11-251)	
R-633	+.010	-6345	/			
Ø.191		192			*	
1.000	+ -010	1.002			•	
-500	+-010	-500			,	

Measured by:	. ડો.	Audited by:	を大	Preliminary Approval:	
Date:	13-5-12	Date:	13/05/13	Date:	

Rev	Date	Change	Revised by	Approved
Е	10.04.14	Added preliminary approval	KJ	